[redacted]

VOYAGER 1

#510

LOW ENERGY CHARGED PARTICLE S-AVERAGED
77-084A-07A
LOW ENERGY CHARGED PARTICLE T-AVERAGED
77-084A-07B

VOYAGER 2

LOW ENERGY CHARGED PARTICLE S-AVERAGED
77-076A-07A
LOW ENERGY CHARGED PARTICLE T-AVERAGED
77-076A-07B

[redacted]

VOYAGER 2

LOW-ENERGY TIME-AVGD. FLUX, TAPE

77-076A-07B

This data set has been restored. There were originally two 9-track, 1600 BPI tapes written in Binary. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tapes were created on a PDP11 computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005067	DS005067	D042102	1	06/09/79 - 07/03/79
		D042233	2	07/05/79 - 07/23/79

VOYAGER 1

LOW-ENERGY TIME-AVERAGED FLUX, TAPE

77-084A-07B

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED EIGHT 9-TRACK, 1600 BPI TAPES, WRITTEN IN BINARY, TWO OF THESE TAPES (D042101 AND D042237 WERE REPLACED BY D042236). THERE ARE TWO RESTORED TAPES. THE DR TAPES ARE 3480 CARTRIDGES AND THE DS TAPES ARE 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A PDP 11 COMPUTER AND THEY WERE RESTORED ON AN IBM 9021 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR003990	DS003990	D042098	1	09/07/77 - 12/31/77
		D042099	2	01/01/78 - 07/19/78
		D042100	3	07/20/78 - 12/31/78
		D042236	4	01/01/79 - 08/01/79
DR003991	DS03991	D042235	1	08/04/79 - 10/17/79
		D042234	2	10/17/79 - 12/30/79

VOYAGER 2

LOW-ENERGY SECTOR-AVG. FLUX, TAPE

77-076A-07A

This data set has been restored. There were originally six 9-track, 1600 BPI tapes written in Binary. There are two restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 9-track, 6250 BPI. The original tapes were created on a PDP11 computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR004564	DS004564	D042092	1	07/03/79 - 07/08/79
		D042093	2	07/08/79 - 07/11/79
		D042094	3	07/11/79 - 07/14/79
DR004565	DS004565	D042095	1	07/14/79 - 07/16/79
		D042096	2	07/16/79 - 07/21/79
		D042097	3	07/21/79 - 07/25/79

REQ. AGENT	RD#	ACQ. AGENT
GLS	V0109	RWV

VOYAGER 1

LOW ENERGY CHARGED PARTICLE S-AVERAGED
77-084A-07A

LOW ENERGY CHARGED PARTICLE T-AVERAGED
77-084A-07B

VOYAGER 2

LOW ENERGY CHARGED PARTICLE S-AVERAGED
77-076A-07A

LOW ENERGY CHARGED PARTICLE T-AVERAGED
77-076A-07B

This data set catalog contains 4 data sets from Voyager 1 & 2 satellites. Each satellite has 2 data sets: Low Energy Charged Particle Sector-Averaged and Low Energy Charged Particle Time-Averaged. The data sets are on 9 track, 1600 BPI, binary magnetic tapes, with one file of data per tape. They were created on the PDP 11 computer. There are 26 tapes in the data set catalog. The following list gives the D&C numbers and the time span of each tape.

VOYAGER 1
LOW ENERGY CHARGED PARTICLE S-AVERAGED 77-084A-07A

D#	C#	TIME SPAN
D-42082	C-21961	02/24/79 - 03/04/79
D-42083	C-21962	03/04/79 - 03/05/79
D-42084	C-21963	03/05/79 - 03/07/79
D-42085	C-21964	03/07/79 - 03/10/79
D-42086	C-21965,66	03/10/79 - 03/11/79 & 03/11/79
D-42087	C-21967	03/11/79 - 03/12/79
D-42088	C-21968	03/12/79 - 03/14/79
D-42089	C-21969	03/14/79 - 03/16/79
D-42090	C-21670	03/16/79 - 03/20/79
D-42091	C-21971	03/20/79 - 03/21/79

VOYAGER 1
LOW ENERGY CHARGED PARTICLE T-AVERAGED 77-084A-07B

D#	C#	TIME SPAN
D-42098	C-21941	09/07/77 - 12/31/77
D-42099	C-21942	01/01/78 - 07/19/78
D-42100	C-21943	07/20/78 - 12/31/78
D-42101	C-21944	01/30/79 - 02/24/79
D-42234	C-23654	10/17/79 - 12/30/79
D-42235	C-23655	08/03/79 - 10/17/79
*D-42236		
D-42237	C-23656	01/01/79 - 03/05/79

*D-42236 is a bad tape we are waiting for a replacement.

VOYAGER 2
LOW ENERGY CHARGED PARTICLE S-AVERAGED 77-076A-07A

D#	C#	TIME SPAN
D-42092	C-21947	07/03/79 - 07/08/79
D-42093	C-21948	07/08/79 - 07/11/79
D-42094	C-21949	07/11/79 - 07/14/79
D-42095	C-21950	07/14/79 - 07/16/79
D-42096	C-21951	07/16/79 - 07/21/79
D-42097	C-21952	07/21/79 - 07/25/79

VOYAGER 2
LOW ENERGY CHARGED PARTICLE T-AVERAGED 77-076A-07B ✓

D#	C#	TIME SPAN
D-42102	C-21953	06/09/79 - 07/03/79
D-42233	C-23657	07/05/79 - 07/23/79

*Please note that these tapes were created on the PDP 11 computer. The first two and last two characters of each word are reversed when converting to decimal. One exception is tape D-42093 or C-21948, the characters are not reversed in each word when converting to decimal.

07

THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
Johns Hopkins Road, Laurel, Maryland 20810
Telephone: (301) 953-7100 and 792-7800

77-084A-07A+B
77-076A-07A+B

October 31, 1980

Mr. Robert Vostray, Code 601
National Space Science Data Center
NASA/GSFC
Greenbelt, Maryland 20771

Dear Mr. Vostray:

Please accept 21 tapes containing Voyager 1 and 2 Low Energy Charged Particle (LECP) data for the NSSDC. Enclosed are listings of the time intervals for the 21 tapes and an explanation of our tape nomenclature. We have not as yet had the opportunity to make copies of the full set of LECP tapes nor have we finalized documentation for them. In addition, several of the tape copies contain large data gaps which will have to be filled in. We intend to remedy these difficulties within the next few weeks. This set of tapes represents the first installment of the LECP contribution.

Sincerely,

S. M. Krimigis

S. M. Krimigis
Principal Investigator, LECP
301-953-7100
x 3252

Enclosures
SMK:JFC:klb

cc: M. A. Mitz, Code SL, NASA Hdqtrs.
E. C. Stone, JPL
C. H. Stembridge, JPL
R. H. Steinbacher, JPL
T. P. Armstrong, U. of Kansas

THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
Johns Hopkins Road, Laurel, Maryland 20810
Telephone: (301) 953-7100 and 792-7800

November 11, 1980

Mr. Bob Vostrey
National Space Science Data Center
Goddard Space Flight Center
Greenbelt, Maryland 20771

Dear Bob:

This letter includes material describing the Voyager LECP data which has been submitted to the Center. The enclosed memo describes the tape formats for the LECP "Averages" (15 minute and 1 hour) which are used for synoptic studies of cruise and encounter. This memo is based on our latest understanding of the flight performance of the instrument and of the operation of our ground software. In major outline we believe all this information to be accurate. However, we have not had either the manpower or time to digest and validate completely all of the details and thus reserve the right to revise this description of the data if further studies of it warrant. Also, we will send more complete descriptions of some items as they become available.

Sincerely,

Thomas P. Armstrong

Thomas P. Armstrong
on behalf of the Voyager LECP Team,
S. M. Krimigis, Principal Investigator

Enclosures: Table 1 - List of LECP Average Tape Items, VKA Tapes
Table 2 - Passbands and Geometrical Factors for VGR1
Table 3 - Passbands and Geometrical Factors for VGR2
Table 4 - Ion Responses for Detector Alpha, VGR 1 & 2
Reprint of Voyager LECP Instrument Articles from
Space Science Reveiws

cc: LECP Team Members
SIP Group Files

FAT tapes contain LECP data which have been sector-averaged. Time resolution in these files depends on the LECP step rate and can vary from 6 seconds to 6 minutes.

FAV or SAT tapes contain LECP data which have been time-averaged and binned according to sector. The time resolution in these files is usually 15 minutes or 1 hour.

F 2

VG1 FAT COPIES

TAPE	START TIME	END TIME	COMMENTS
FAT19055	79-055-2324	79-063-0003	3 day gap
FAT19063	79-063-0000	79-064-1010	
FAT19064	79-064-1010	79-066-0414	
FAT19066	79-066-0414	79-068-0835	
FAT19068	79-068-0835	79-070-0735	
FAT19070	79-070-0735	79-071-2307	
FAT19071	79-071-2307	79-073-1817	
FAT19073	79-073-1817	79-075-1057	
FAT19075	79-075-1057	79-079-0302	
FAT19079	79-079-0302	79-080-1355	

F3

VG1 SAT COPIES

TAPE	START TIME	END TIME	COMMENTS
FAV17250	77-250-0000	77-365-1457	hr avgs 2 day-gaps
FAV18001	78-001-0027	78-200-1809	hr avgs 5 day-gaps
FAV18201	78-201-1509	78-365-2257	hr avgs 6 day-gaps
FAV19030	79-030-0000	79-055-2314	15 min avgs 1 day-gap

A "day-gap" is a data gap of 24 hours or longer.

F4

VG2 FAT COPIES

TAPE	START TIME	STOP TIME	COMMENTS
FAT29184	79-184-1701	79-189-0538	Partial gap listing only
FAT29189	79-189-0544	79-192-0803	No gap listing
FAT29192	79-192-1526	79-195-0819	
FAT29195	79-195-0819	79-197-0959	
FAT29197	79-197-0950	79-202-1620	1 day-gap
FAT29202	79-202-1620	79-206-0907	

F5

VG2 SAT COPIES

TAPE	START TIME	STOP TIME	COMMENTS
FAV29160	79-160-2312	79-184-2359	15 min avgs

Provisional
To be Revised ≈ 12/31/80

AVGWIF: FLUX AVERAGE TAPE FILE DEFINITION. THIS TAPE IS WRITTEN AS 1600 BPI 9 TRACK NRZI IN FIXED LENGTH RECORDS BLOCKED 1:1. EACH RECORD IS 4800 16 BIT WORDS IN LENGTH. MOST ARE INTEGER. ONLY THE COUNT RATES AND FLUXES ARE 32 BIT FLOATING POINT IN ~~HONEYWELL~~ STANDARD BINARY. THE LIST BELOW GIVES THE DEFINITIONS OF THE ITEMS ON EACH RECORD.

REV: 3/21/79 D/D

PDP 11

ITEM	NAME	TYPE	DESCRIPTION	WORD
1	SCID	I*2	SPACECRAFT IDENTIFICATION/MODE LEFT BYTE IS S/C ID. 0=VGR 2 1=VGR 1 RIGHT BYTE IS MODE(HEX) A=GS3, 7=CR1, 1=CR2, 2=CR3,5=CR6,8=NE	1
2	SPARE	I*2		2
3	ST01	I*2	FIRST OCCURENCE OF STATUS WORD 1	3
4	ST01	I*2	LAST OCCURENCE OF STATUS WORD 1	4
5	ST02	I*2	FIRST OCCURENCE OF STATUS WORD 2	5
6	ST02	I*2	LAST OCCURENCE OF STATUS WORD 2	6
7	ST03	I*2	FIRST OCCURENCE OF STATUS WORD 3	7
8	ST03	I*2	LAST OCCURENCE OF STATUS WORD 3	8
9	ST04	I*2	FIRST OCCURENCE OF STATUS WORD 4	9
10	ST04	I*2	LAST OCCURENCE OF STATUS WORD 4	10
11	ST05	I*2	FIRST OCCURENCE OF STATUS WORD 5	11
12	ST05	I*2	LAST OCCURENCE OF STATUS WORD 5	12
13	ST06	I*2	FIRST OCCURENCE OF STATUS WORD 6	13
14	ST06	I*2	LAST OCCURENCE OF STATUS WORD 6	14
15	SPARE	I*2		15
16	SPARE	I*2		16
17	SPARE	I*2		17
18	TIMUNT	I*2	BASIC ACCUM. TIME UNIT IN SECONDS FROM MRT	18
19	SPARE	I*2		19
20	SPARE	I*2		20
21	SPARE	I*2		21
22	AVGINC	I*2	100*AVERAGING INCREMENT IN HOURS.	22
23	AVYEAR	I*2	AVG. WINDOW YEAR AT START	23
24	AVDAY	I*2	AVG. WINDOW DAY AT START	24
25	AVHOUR	I*2	AVG. WINDOW HOUR AT START	25
26	AVSEC	I*2	AVG. WINDOW SECONDS AT START	26
27-29	SPARES	I*2		27-29
30	ITALP	I*2	TIME CONSTANT FOR P-ALPHA COR.(NANOSECS.)	30
31	ITALB	I*2	TIME CONSTANT FOR E BETA COR.(NANOSECS.)	31
32-34	SPARES	I*2		32-34
35	SECST	I*2	16*AVG BEGIN TIME IN SECONDS(OFFSET)	35
36	SECSP	I*2	16*AVG END TIME IN SECONDS (OFFSET)	36
37	M60F	I*2	VALUE OF MOD 60 AT FIRST APPEARANCE	37
38	M60L	I*2	VALUE OF MOD 60 AT LAST APPEARANCE	38
39	M16F	I*2	VALUE OF MOD 2**16 AT FIRST APPEARANCE	39
40	M16L	I*2	VALUE OF MOD 2**16 AT LAST APPEARANCE	40
41	SCETHS	I*2	SPACECRAFT EVENT TIME HOUR AT START	41
42	SCETHE	I*2	SPACECRAFT EVENT TIME HOUR AT END	42
43	SCETSS	I*2	SPACECRAFT EVENT TIME SECOND AT START	43
44	SCETSE	I*2	SPACECRAFT EVENT TIME SECOND AT END	44

Header

Dead time { contact experimenter for details before using this field.
Dead time

```
 45   SCETMS I*2   SPACECRAFT EVENT TIME MILLISECOND START      45
 46   SCETME I*2   SPACECRAFT EVENT TIME MILLISECOND END        46
 47   SCETYS I*2   SPACECRAFT EVENT TIME YEAR AT START          47
 48   SCETYE I*2   SPACECRAFT EVENT TIME YEAR AT END            48
 49-100  SPARES I*2                                            49-100

THE FOLLOWING 1000 ITEMS, FLOATING POINT, ARE THE COUNT RATES
OF 100 DATA CHANNELS IN 10 SECTOR POSITIONS.
THE SUBSCRIPTING OF THE RATES(I,J) ARRAY IS: FIRST INDEX IS CHANNEL
NUMBER AND SECOND INDEX IS SECTOR (1-8 AS USUAL, 9 = SPARE    AND
10 = SCAN AVERAGE).  THE 100 CHANNELS ARE DESCRIBED BELOW:

NUM.    NAME    SPECIES    ENERGY(MEV/NUCLEON)   DETECTOR
                           (NOMINAL-DO NOT USE
                            THIS WITHOUT CHECKING  MEANS THAT THE GAIN
                            THE PASSBAND LIST!     STATE MUST BE CHECKED
 1      EB01    ELECTRON   0.015 TO 0.037        BETA *
 2      EBD1    ELECTRON   0.015 TO 0.200        BETA PRIME *
 3      EB02    ELECTRON   0.037 TO 0.061        BETA
 4      EBD2    ELECTRON   0.037 TO 0.200        BETA PRIME
 5      EB03    ELECTRON   0.070 TO 0.112        BETA
 9      EB05    ELECTRON   0.20   & UP           BETA
10      EBD5    ELECTRON   0.20   & UP           BETA PRIME
11      EG06    ELECTRON   0.20   & UP           GAMMA
12      EG07    ELECTRON   0.40   & UP           GAMMA
13      EG08    ELECTRON   0.70   & UP           GAMMA
14      EG09    ELECTRON   1.50   & UP           GAMMA
15        44    ELECTRON   0.35   TO 1.50        E4(E5A)(E3)(E2)
16        45    ELECTRON   2.5    & UP           E4 E3A (E3C)(E5A)(E2)
17        37    ELECTRON   6.0    & UP           E4 (E4A)E3C(E5A)(E2)

18      PL01    Z.GE.1     0.030 TO 0.053 (Z=1)  A1(A2) *
19      PL02    Z.GE.1     0.053 TO 0.085 (Z=1)  A2(A3)
20      PL03    Z.GE.1     0.085 TO 0.139 (Z=1)  A3(A4)
21      PL04    Z.GE.1     0.139 TO 0.200 (Z=1)  A4(A5)
22      PL05    Z.GE.1     0.200 TO 0.550 (Z=1)  A5(A6)
23      PL06    Z.GE.1     0.540 TO 1.05  (Z=1)  A6(A7)
24      PL07    Z.GE.1     1.05  TO 2.03  (Z=1)  A7(A8)
25      PL08    Z.GE.1     2.03  TO 4.01  (Z=1)  A8(A9)

26        32    PROTONS    0.27  TO 0.70        E0 E2 (E3)
27         1    PROTONS    0.48  TO 1.40        E1 E2 (E3) (L12A)
28        10    PROTONS    4.10  TO 10.0        E2 E3 (E4)
29        11    PROTONS    10.0  TO 22.0        E2 E3 (E4)
30        16    PROTONS    3.0   TO 19.0        E5 E4 (E3)
31        23    PROTONS    19.0  TO 31.0        E5 E4 E3 (E2)
32        27    PROTONS    31.0  TO 150.0       E5 E4 E3 E2
33        31    PROTONS    240.  &  UP          E4 E3

34        39    ALPHAS     0.075 TO 0.150       E0 (E2)
```

NON-FUNCTIONAL ON VGR 1.

TABLE 1
(Page . f 7 Pages)

101	[illegible]	33	ALPHAS	0.150 TO 0.430	E0 E2 (E3)
102	36	D1F1	ALPHAS	0.150 TO 1.10	E1
103	37	3	ALPHAS	0.39 TO 1.50	E1 E2 (E3) L12A (L12B)
104	38	4	ALPHAS	1.50 TO 3.70	E1 E2 (E3) L12A (L12B)
105	39	12	ALPHAS	4.20 TO 8.90	E2 E3 (E4) (L23A)
106	40	13	ALPHAS	8.90 TO 21.0	E2 E3 (E4) (L23A)
107	41	17	ALPHAS	3.0 TO 21.0	E5 E4 (E3) L54A (L54B)
108	42	24	ALPHAS	21.0 TO 31.0	E5 E4 E3 (E2)
109	43	28	ALPHAS	34.0 TO 64.0	E5 E4 E3 E2
110	44	AL01	Z.GE.2	0.98 TO 1.77	A9(A10)
111	45	AL02	Z.GE.2	1.77 TO 4.22	A10
112					
113	46	34	ALPHAS	0.23 TO 0.44	E0 E2 (E3)
114	47	5	L-NUCLEI	0.60 TO 4.20	E1 E2 (E3) L12B (L12C)
115	48	14	L-NUCLEI	5.50 TO 33.0	E2 E3 (E4) L23A (L23B)
116	49	18	L-NUCLEI	4.0 TO 21.0	E5 E4 (E3) L54B (L54C)
117					
118	50	38	M-NUCLEI	0.047 TO 0.125	E0 (E2)
119	51	35	M-NUCLEI	0.125 TO 0.260	E0 E2 (E3)
120	52	D1F2	M-NUCLEI	0.130 TO 10.	E1
121	53	6	M-NUCLEI	0.440 TO 2.90	E1 E2 (E3)
122	54	7	M-NUCLEI	2.90 TO 7.80	E1 E2 (E3)
123	55	15	M-NUCLEI	7.80 TO 40.0	E2 E3 (E4) L23B (L23C)
124	56	19	M-NUCLEI	6.30 TO 10.0	E5 E4 (E3) L54C (L54D)
125	57	20	M-NUCLEI	10.0 TO 42.0	E5 E4 (E3) L54C (L54D)
126	58	25	M-NUCLEI	42.0 TO 64.0	E5 E4 E3 (E2)
127	59	29	M-NUCLEI	64.0 TO 200.	E5 E4 E3 E2
128					
129	60	36	H-NUCLEI	0.062 TO 0.105	E0 E2 (E3)
130	61	8	H-NUCLEI	0.250 TO 2.00	E1 E2 (E3)
131	62	9	H-NUCLEI	2.00 TO 13.0	E1 E2 (E3)
132	63	43	H-NUCLEI	13.0 TO 74.0	E2 E3 (E4) L23C
133	64	21	H-NUCLEI	8.60 TO 21.0	E5 E4 (E3) L54D
134	65	22	H-NUCLEI	21.0 TO 86.0	E5 E4 (E3) L54D
135	66	26	H-NUCLEI	86.0 TO 125.	E5 E4 E3 (E2)
136	67	30	H-NUCLEI	125.0 & UP	E5 E4 E3 E2
137					
138	68	42	MISC. SINGLES		AR
139	69	42	MISC. SINGLES		E0
140	70	42	MISC. SINGLES		E1
141	71	42	MISC. SINGLES		E2
142	72	42	MISC. SINGLES		E3
143	73	42	MISC. SINGLES		E4
144	74	42	MISC. SINGLES		E5
145	75	42	MISC. SINGLES		AL
146	76	41	MISC. COINCIDENCE		AL AR
147					
148	C NEAR ENCOUNTER ONLY DATA CHANNELS(ONLY USED AT V1 JUPITER PERIAPSIS)				
149					
150	77	ESA0	ELECTRONS 2.5 & UP		A SINGLES

151		ESB0	ELECTRONS 8.5 & UP	B SIN[illegible]ES
152	79	AB10	ELECTRONS 8.5 & UP	A1 B0 COINC.
153	80	DP09	IONS 0.285 TO 5.02	DELTA '
154	81	DP10	IONS 0.480 TO 2.58	DELTA '
155	82	DP11	IONS 0.725 TO 1.64	DELTA '
156	83	PD09	IONS 0.285 TO 5.25	DELTA
157	84	PD10	IONS 0.480 TO 2.72	DELTA
158	85	PD11	IONS 0.725 TO 1.72	DELTA
159	86	AB12	IONS 54.0 TO 87.3	A1 B2 COINC.
160	87	AB13	IONS 87.3 TO 152.	A1 B3 COINC.
161	88	PSA1	IONS 15.8 TO 158.	A1 SINGLES
162	89	PSA2	IONS 15.8 TO 49.0	A2 SINGLES
163	90	PSA3	IONS 16.3 TO 26.2	A3 SINGLES
164	91	PSB1	IONS 54.0 TO 174.	B1 SINGLES
165	92	PSB2	IONS 54.0 TO 87.3	B2 SINGLES
166	93	PSB3	IONS 54.0 TO 59.0	B3 SINGLES
167	94	DA03	IONS Z.GE.2 0.480 TO 2.45	DELTA '
168	95	DA04	IONS Z.GE.2 0.780 TO 1.41	DELTA '
169	96	DZ01	IONS Z.GT.2 0.405 TO 18.8	DELTA '
170	97	AD03	IONS Z.GE.2 0.480 TO 2.58	DELTA
171	98	AD04	IONS Z.GE.2 0.780 TO 1.48	DELTA
172	99	ZD01	IONS Z.GT.2 0.400 TO 19.8	DELTA
173	100	SPARE		

1001-2000 I*2 UNCERTAINTIES OF ITEMS 1-1000,SAME SUBSCRIPTING
IN UNITS OF 64*PERCENT

2001-3000 I*2 NUMBER OF SAMPLES OF ITEMS 1-1000,SAME SUBSCRIPTING,
IN UNITS OF BASIC ACCUM. TIME FOR MODE
!!!!YOU MUST CHECK THIS ITEM FOR GT.0 BEFORE USING
ANY OF THE COUNT RATE OR FLUX DATA.

701-800 R*4 FLUXES CORRESPONDING TO ITEMS 1-100 ABOVE
DIFFERENTIAL FLUXES EVALUATED AT STANDARD VALUES OF THE
ENERGY AND CORRECTED FOR FINITE PASSBAND WIDTHS AND
CONTAMINATION BY UNDESIRED SPECIES.

801-900 I*2 FLUX UNCS. IN UNITS OF 64*PERCENT
BY EXPRESSING THE UNCERTAINTY IN UNITS OF 64*PERCENT
WE CAN USED AN INTEGER VARIABLE HERE. THIS HAS TWO ADVAN-
TAGES: ONE, IT SAVES SPACE IN THE RECORD, AND TWO, REAL
NUMBERS HAVE TO BE CONVERTED INTO MACHINE-DEPENDENT
FORM OF INTERNAL BINARY WORD.

****
****

THE ABOVE RECORD CAN BE REFERENCED IN FORTRAN WITH THE FOLLOWING
SEQUENCE OF VARIABLES:

```
      IHEAD(100)   HEADER INFORMATION
      RATES(100,10)  COUNT RATES IN 100 CHANNELS FOR 10 SECTORS
      IUNCS(100,10)  UNCERTAINTIES OF ABOVE COUNT RATES IN UNITS
                     OF 64*PERCENT
      NSAMP(100,10)  NUMBER OF SAMPLES FOR EACH COUNT RATE IN UNITS
                     OF THE BASIC ACCUMULATION INTERVAL. THIS MUST
                     BE GREATER THAN ZERO FOR VALID DATA TO EXIST.
      IFIL(400)      SPARES.
      FLUXES(100)    ESTIMATED SCAN AVERAGED FLUXES FOR EACH OF THE
                     100 DATA CHANNELS.  THESE ARE USUALLY DIFFERENTIAL
                     FLUXES EVALUATED AT THE STANDARD ENERGIES GIVEN
                     IN THE PASSBAND TABLE--SOME ARE INTEGRAL.  IT
                     IS OBVIOUS FROM THE TABLE WHICH IS WHICH.
                     THERE ARE MANY INSTRUMENTAL EFFECTS WHICH INFLUENCE
                     THE ESTIMATES OF FLUXES OF THE VARIOUS PARTICLE
                     TYPES AND IT IS IMPOSSIBLE TO COMPLETELY DESCRIBE
                     THE ACCURACY OF THE ESTIMATES FOR ALL CHANNELS
                     IN ALL OF THE FLIGHT SITUATIONS.  WE HAVE ATTEMPTED
                     TO CORRECT FOR DETECTOR DEAD.TIME, GEOMETRICAL
                     FACTORS, AND PASSBAND.  HOWEVER, IF YOU NEED
                     HIGH PRECISION ESTIMATES OF FLUXES, YOU SHOULD
                     CHECK WITH S.M.KRIMIGIS OR T.P.ARMSTRONG BEFORE
                     USING THIS DATA.
                     THIS FOLLOWING IS A BRIEF SYNPOSIS OF THE
                     LECP INSTRUMENTAL PERFORMANCE AT JUPITER ENCOUNTER.
                     ****VOYAGER 1*****
                     LEMPA
                       ALPHA--CHANNELS PL06,PL07,PL08,AL01,AL02 ARE
                              NOMINAL THROUGHOUT.
                              CHANNELS PL01,PL02,PL03,PL04,PL05 HAVE
                              A BACKGROUND FROM OMNIDIRECTIONALLY
                              PENETRATING ELECTRONS WHICH BECOMES
                              SIGNIFICANT AT ABOUT 10 RJ. WITHIN ABOUT
                              8 RJ PL01 AND PL02 HAVE A VERY SEVERE
                              BACKGROUND AND MUST NOT BE USED AS NOMINAL!
                              CHANNELS PL01,PL02,PL03,PL04,PL05 HAVE
                              AND AMPLITUDE AND PULSE SHAPE DEPENDENT
                              DEAD TIME WHICH BECAME VERY IMPORTANT
                              WITHIN 10 RJ.  CORRECTIONS FOR THIS EFFECT
                              HAVE BEEN APPLIED.  THIS PRECISION OF
                              THE CORRECTED DATA IS DIFFICULT TO ESTIMATE
                              AND IT VARIES WITH THE INPUT RATES.
                              MY "GUESTIMATES" OF THE SYSTEMATIC UNCERT-
                              TAINTY OF THE CORRECTED RATES OF PL05,4,3,2,1
                              WITHIN 10 RJ ARE 15%,30%,60%,120%,AND 240%.
                              USE OF THIS DATA MUST BE GUIDED BY THE LARGE
                              SYSTEMATIC UNCERTAINTY OF THE DEAD TIME CORRECT-
                              ION.
                       BETA---CHANNELS EB01,2,3,4,5 HAVE BEEN DEAD TIME COR-
                              RECTED AND ARE RELIABLE THROUGHOUT THE ENCOUNTER
```

TO A PRECISION OF ABOUT 30% (WORST CASE). THESE CHANNELS HAVE A SIGNIFICANT OMNIDIRECTIONAL ELECTRON BACKGROUND WHICH CAN BE ASSESSED BY COMPARING SECTOR 8 (BACKGROUND) WITH THE FOREGROUND RATES. WITHIN ABOUT 7 RJ THESE CHANNELS SHOULD NOT BE USED.

BETA'--SAME COMMENTS APPLY AS FOR BETA, ABOVE. ALSO THE LOOK ANGLES AND DIRECTIONS OF THIS DETECTOR ARE COMPLEX. CONFER WITH C. MACLENNAN OR L. LANZEROTTI ABOUT LOOK DIRECTIONS FOR BETA AND BETA '.

GAMMA--THIS DETECTOR IS NON-FUNCTIONAL ON VOYAGER 1.

DELTA--THIS DETECTOR SYSTEM OPERATED IN THE NEAR ENCOUNTER MODE. THERE WAS SOME INSTRUMENTAL INTERFERENCE IN THIS DETECTOR SYSTEM WHICH HAS BEEN REMOVED BY SUBTRACTING SECTOR 8 (BACKGROUND PLUS INSTRUMENTAL NOISE) FROM ALL FOREGROUNW SECTORS AND THE SECTOR AVERAGE. THE GEOMETRIC FACTORS AND PASSBANDS FOR THIS DETECTOR DIFFERED IN THE FLIGHT DATA FROM THOSE IN THE LATEST AVAILABLE LABORATORY CALIBRATION. THE VALUES LISTED IN THE PASSBAND TABLE ARE THE BEST AVAILABLE VALUES WHICH YIELD FLUXES CONSISTENT WITH THOSE OF THE ALPHA DETECTOR. THERE IS NO SIGNIFICANT DEAD TIME CORRECTION NECESSARY FOR THIS DETECTOR.

DELTA'-THE SAME COMMENTS AS FOR DELTA ABOVE APPLY HERE. ALSO, THE LOOK ANGLES FOR THIS DETECTOR ARE COMPLICATED. CHECK WITH C. MACLENNAN OR L. LANZEROTTI FOR FURTHER INFORMATION.

AB-----THIS DETECTOR SYSTEM HAD NO DEAD TIME EFFECTS. PASSBANDS AND GEOMETRIC FACTORS ARE NEAR THE NOMINAL VALUES GIVEN IN THE TABLE. MOST OF THE RESPONSE OF THIS SYSTEM IS DOMINATED BY PENETRATINZ ELECTRONS. PSA3 IS AN EXCEPTION--IT RESPONDS TO 16 TO 20 MEV IONS (Z.GE.1).

LEPT THIS SYSTEM WAS PROGRESSIVELY SHUT DOWN DURING JUIPTER ENCOUNTER BECAUSE OF ITS HIGH SENSITIVITY AND LONG TIME CONSTANTS. IT WAS NOT OPERATED AT ALL DURING THE NEAR ENCOUNTER PHASE. MEASUREMENTS IN THE OUTER MAGNETOSPHERE CAN BE USED, PROVIDED THE DUE CARE IS TAKEN TO ESTABLISHED THAT ALL LOGICAL COMPONENTS OF EACH CHANNEL WERE OPERATING IN A NON-SATURATED CONDITION AT THE TIME THE DATA WAS ACQUIRED.

****

****

SECTORING AND DATA SAMPLING:

1. WHEN THE SPACECRAFT IS IN GS3 MODE AND LECP IS STEPPING AT 6 SECOND INTERVALS, NOT ALL OF THE COUNT RATE CHANNELS ARE SAMPLED WITHIN A GIVEN STEP. THE RESULT OF THIS IS THAT SOME OF THE CHANNELS HAVE

TABLE 1
(Page of 7 Pages)

```
  301           READINGS FROM SEVERAL SECTORS COMBINED.  EXT.  IE CARE SHOULD BE TAKEN
  302           IN NOT USING DATA FROM CHANNEL NUMBER 22 OR GREATER IN ANGULAR
  303           DISTRIBUTION STUDES AT TIMES WHEN THE INSTRUMENT WAS STEPPING AT
  304           6 SECOND INTERVALS IN THE GS3 MODE.  THE VOYAGER 1 SPACECRAFT
  305    some   EXPERIENCED ~~FROM~~ DIFFICULTIES WITH FDS TIMING WHICH CAUSE SOME  ✓
  306           MINOR MISALIGNMENTS OF THE STEPPING TIMES AND DATA AVERAG ING TIMES.
  307           THIS OCCURRED GENERALLY IN THE DAY 64 07:00 TO 15:00 INTERVAL.
  308           THIS HAS ONLY A MINOR EFFECT ON THE FOREGR OUND RATES BUT IS
  309           CAN BE SEEN AS ANOMALOUSLY LARGE RATES IN SECTOR 8 (BACKGROUND)
  310           WHICH HAVE A PECULIAR STAIRSTEP APPEARANCE.
  311
TOTAL RECORDS WRITTEN =    71
EXIT
$$
$EOJ
$$
```

TABLE 2
(Page 1 of 5 Pages)

```
C PASSBANDS,BACKGROUNDS,AND GEOMETRIC FACTORS FOR FU2 VOYAGER I
C FEBRUARY 19,1979:3/19/79, DELTA GF, DEF,SECTORS CORRECTED
C        THRESHOLDS  3/21/79 D-D' SUBCOM CORRECTED
FAT  NAME     LOW     HIGH     MEAN    ~~OKORHD~~     G.F.     TEXT
 #          (MEV/N) (MEV/N) (MEV/N) ~~(C/SEC.)~~ (CMSQSR)
 1.  EB01 0.0150  0.0370  0.0200 0.0000000 0.006000 1 0 0 0 2   — TWO GAIN STATES.
 2.  EBD1 0.0150  0.5000  0.0200 0.0000000 0.000120 1 4 0 0 2
    *S ** 0.93 1.09 1.24 1.18 1.00 0.43 0.20
 3.  EB02 0.0370  0.0610  0.0450 0.0000000 0.006000 1 0 0 0 2
 4.  EBD2 0.0370  0.5000  0.0450 0.0000000 0.000120 1 4 0 0 2
    *S ** 0.93 1.09 1.24 1.18 1.00 0.43 0.20
 5.  EB03 0.0700  0.1120  0.0900 0.0000000 0.006000 1 0 0 0 2
 6.  EBD3 0.0700  0.5000  0.0900 0.0000000 0.000120 1 4 0 0 2
    *S ** 0.93 1.09 1.24 1.18 1.00 0.43 0.20
 7.  EB04 0.1300  0.1830  0.1200 0.0000000 0.006000 1 0 0 0 3
 8.  EBD4 0.1300  0.5000  0.1200 0.0000000 0.000120 1 4 0 0 3
    *S ** 0.93 1.09 1.24 1.18 1.00 0.43 0.20
 9.  EB05 0.2000  0.5000  0.2000 0.0000000 0.006000 1 0 0 0 4
10.  EBD5 0.2000  0.5000  0.2000 0.0000000 0.000120 1 4 0 0 4
    *S ** 0.93 1.09 1.24 1.18 1.00 0.43 0.20
11.  EG06 0.2520  2.0000  0.2500 0.0000000 0.002000 1 0 0 0 5
12.  EG07 0.4800  2.0000  0.5000 0.0000000 0.002000 1 0 0 0 5   NON-FUNCTIONAL ON VGR1
13.  EG08 0.8530  2.0000  0.9000 0.0000000 0.002000 1 0 0 0 6
14.  EG09 2.1000  5.0000  2.0000 0.0000000 0.002000 1 0 0 0 7
15.  E 44 0.3500  1.5000  0.5000 0.0000000 1.310000 1 0 0 035
16.  E 45 2.5000  100.00  2.0000 0.0000000 1.310000 1 0 0 035
17.  E 37 6.0000  100.00  6.0000 0.0000000 1.310000 1 0 0 035
18.  PL01 0.0300  0.0530  0.0250 0.0000000 0.040200 1 0 0 0 9
19.  PL02 0.0530  0.0850  0.0500 0.0000000 0.040200 1 0 0 0 9
20.  PL03 0.0850  0.1390  0.1000 0.0000000 0.040200 1 0 0 0 9
21.  PL04 0.1390  0.2000  0.1500 0.0000000 0.040200 1 1 21110
    *A ** 0.0343  0.0538
22.  PL05 0.2000  0.5500  0.2500 0.0000000 0.040200 1 1 21211   see TABLE 4 for full
    *A ** 0.0538  0.1500                                        description
23.  PL06 0.5400  1.0500  0.6000 0.0000000 0.040200 1 1 31312
    *A ** 0.1500  0.2700
24.  PL07 1.0500  2.0300  1.0000 0.0000000 0.040200 1 1 31413
    *A ** 0.2700  0.5100
25.  PL08 2.0300  4.0100  2.5000 0.0000000 0.040200 1 1 41414
    *A ** 0.5100  0.9800
26.  P 32 0.3100  0.6100  0.3500 0.0000000 0.097500 1 0 0 042 E0E2(E3)  → LOW EFFICIENCY.
27.  P  1 0.5700  0.8900  0.6000 0.0000000 0.441000 1 0 0 016 E1E2(E3)
28.  P 10 4.4000  9.2000  5.0000 0.0000000 0.539000 1 0 0 017 E2E3(E4)
29.  P 11 9.2000  21.000  12.000 0.0000000 0.539000 1 0 0 017 E2E3(E4)
30.  P 16 3.4000  17.600  5.0000 0.0000000 1.500000 1 0 0 018 E5E4(E3)
31.  P 23 22.000  31.000  25.000 0.0000000 1.310000 1 0 0 018 E5E4E3(E2)
32.  P 27 34.000  71.500  50.000 0.0000000 1.200000 1 0 0 018 E5E4E3E2
33.  P 31 211.00  1000.0  250.00 0.0000000 1.310000 1 0 0 036 E4E3 CA
34.  A 39 0.1000  0.2030  0.1000 0.0000000 0.097500 1 2122620 E0(E2)
   * M ** 0.0250  0.0720
```

TABLE 2
(Page 2 of 5 Pages)

51	35.	H	33	0.2000	0.5100	0.3500	0.0000000	0.097500	1	0	0 021	E0E2(E3)
52	36.	H	46	0.1470	2.00007	0.6000	0.0000000	0.441000	1	0	0 021	D1F1.CA
53	37.	H	3	0.4600	1.8000	0.6000	0.0000000	0.441000	1	0	0 022	E1E2(E3)
54	38.	H	4	1.9000	4.0000	2.5000	0.0000000	0.441000	1	0	0 022	E1E2(E3L12
55	39.	A	12	4.2000	7.8000	5.0000	0.0000000	0.539000	1	0	0 024	E2E3(E4L23
56	40.	A	13	7.8000	21.000	15.000	0.0000000	0.539000	1	0	0 024	E2E3(E4L23
57	41.	A	17	3.3000	69.000	5.0000	0.0000000	1.500000	1	2183025		E5E4(E3L54
58		*M	**	127.00	1000.0							CONTAMINANT
59	42.	A	24	22.000	31.000	25.000	0.0000000	1.310000	1	0	0 025	E5E4E3(E2
60	43.	A	28	33.000	62.000	50.000	0.0000000	1.200000	1	2183025		E5E4E3E2
61		*M	**	341.00	1000.0							CONTAMINAN
62	44.	AL01		0.9800	1.7700	1.0000	0.0000000	0.040200	1	2142819		CALC.
63		*M	**	0.2700	0.4700							CONTAMINAN
64	45.	AL02		1.7700	4.2200	2.5000	0.0000000	0.040200	1	2142819		CALC.
65		*M	**	0.4700	1000.0							CONTAMINAN
66	46.	M	34	0.1500	0.1800	0.2000	0.000000	0.097500	1	0	0 021	E0 E2 CALC
67	47.	L	5	0.4700	5.6000	1.5000	0.000000	0.441000	1	0	0 043	E1E2(E3L12
68	48.	L	14	5.8000	28.000	6.0000	0.000000	0.539000	1	0	0 043	E2E3(E4L23
69	49.	L	18	6.8000	28.000	5.0000	0.000000	1.500000	1	0	0 043	E5E4(E3L54
70	50.	M	38	0.0720	0.1500	0.1000	0.000000	0.097500	1	3203126		E0(E2)
71		*H	**	0.0200	0.0770							CONTAMINAN
72	51.	M	35	0.1800	0.2800	0.2500	0.000000	0.097500	1	3203126		E0 E2(E3)
73		*N	**	0.1390	0.2600							CONTAMINAN
74	52.	M	47	0.1240	14.300?	0.2500	0.000000	0.441000	1	3203127		D1F2 CALC
75		*H	**	0.0310	768.007							CONTAMINAN
76	53.	M	6	0.5300	5.6000	0.5000	0.000000	0.441000	1	3213228		E1E2(E3L12
77		*N	**	0.5100	4.6000							CONTAMINAN
78	54.	M	7	6.1700	8.6000	6.0000	0.000000	0.441000	1	0	0 028	E1E2(E3L12
79	55.	M	15	9.5000	46.000	15.000	0.000000	0.539000	1	3233329		E2E3(E4L23
80		*N	**	10.000	51.000							
81	56.	M	19	6.8000	10.400	6.0000	0.000000	1.500000	1	3243430		E5E4(E3L54
82		*N	**	7.1000	10.400							CONTAMINAN
83	57.	M	20	10.400	40.000	15.000	0.000000	1.500000	1	3243430		E5E4(E3L54
84		*N	**	10.000	34.000							CONTAMINAN
85	58.	M	25	48.000	64.000	50.000	0.000000	1.310000	1	3243430		E5E4E3(E2)
86		*N	**	65.000	74.000							CONTAMINAN
87	59.	M	29	68.000	270.00	70.000	0.000000	1.200000	1	3243430		E5E4E3 E2
88		*N	**	78.000	730.00							CONTAMINAN
89	60.	H	36	0.0990	0.1400??	0.1000	0.000000	0.097500	1	0	0 031	E0(E2) CAL
90	61.	H	8	0.3100	2.2000	0.3500	0.000000	0.441000	1	0	0 032	E1E2(E3 CA
91	62.	H	9	2.3000	12.000	2.0000	0.000000	0.441000	1	0	0 032	E1E2(E3 CA
92	63.	H	43	13.000	82.000	15.000	0.000000	0.539000	1	0	0 033	E2E3(E4 CA
93	64.	H	21	9.5000	18.000	10.000	0.000000	1.500000	1	0	0 034	E5E4(E3L54
94	65.	H	22	19.000	78.000	25.000	0.000000	1.500000	1	0	0 034	E5E4(E3L54
95	66.	H	26	82.000	120.00	100.00	0.000000	1.310000	1	0	0 034	E5E4E3 CAL
96	67.	H	30	127.00	850.00	150.00	0.000000	1.200000	1	0	0 034	E5E4E3E2 C
97	68.	S	AR									
98	69.	S	E0									
99	70.	S	E1									
100	71.	S	E2									

TABLE 2
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101  77.  S F3
102  78.  S F4
103  79.  S F5
104  80.  S AT
105  76.  ALAR
106  77.  ESA0 2.5000  99.999  2.5000 0.000000  0.493500 1 0 0 043 A 2-PI SR
107  78.  ESB0 8.5000  99.999  8.5000 0.000000  0.946200 1 0 0 043 B 4-PI SR
108  79.  AB10 8.5000  99.999  8.5000 0.000000  0.050400 1 0 0 043 A-B COINC.
109  80.  DP09 0.2850  5.0200  0.2500 0.000000  0.000840 1 4 0 035 DELTA'
110       *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
111  81.  DP10 0.4800  2.5800  0.6000 0.000000  0.000840 1 4 0 035 DELTA'
112       *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
113  82.  DP11 0.7250  1.6400  1.0000 0.000000  0.000840 1 4 0 036 DELTA'
114       *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
115  83.  PD09 0.2850  5.2500  0.2500 0.000000  0.002600 1 0 0 038 DELTA
116  84.  PD10 0.4800  2.7200  0.6000 0.000000  0.002600 1 0 0 038 DELTA
117  85.  PD11 0.7250  1.5800  1.0000 0.000000  0.002600 1 0 0 039 DELTA
118  86.  AB12 54.000  87.300  50.000 0.000000  0.050400 1 0 0 042 A-B COINC.
119  87.  AB13 87.300  152.00  100.00 0.000000  0.050400 1 0 0 042 A-B COINC.
120  88.  PSA1 15.800  158.00  15.000 0.000000  0.493500 1 0 0 043 A 2-PI SR.
121  89.  PSA2 15.800  49.000  25.000 0.000000  0.493500 1 0 0 042 A 2 PI SR.
122  90.  PSA3 16.300  26.200  25.000 0.000000  0.493500 1 0 0 042 A 2 PI SR.
123  91.  PSB1 54.000  174.00  50.000 0.000000  0.946200 1 0 0 043 B 4 PI SR.
124  92.  PSB2 54.000  87.300  50.000 0.000000  0.946200 1 0 0 042 B 4 PI SR.
125  93.  PSB3 54.000  59.000  50.000 0.000000  0.946200 1 0 0 042 B 4 PI SR.
126  94.  DA03 0.4800  2.4500  0.6000 0.000000  0.000840 1 4 0 043 DELTA'
127      *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
128  95.  DA04 0.7800  1.4100  1.0000 0.000000  0.000840 1 4 0 043 DELTA'
129       *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
130  96.  DZ01 0.4050  18.800  0.6000 0.000000  0.000840 1 4 0 043 DELTA'
131       *S ** 0.92 0.80 0.98 1.00 0.98 0.93 0.85
132  97.  AD03 0.4800  2.5800  0.6000 0.000000  0.002600 1 0 0 043 DELTA
133  98.  AD04 0.7800  1.4800  1.0000 0.000000  0.002600 1 0 0 043 DELTA
134  99.  ZD01 0.4000  19.800  0.6000 0.000000  0.002600 1 0 0 043 DELTA
135  00. SPARE
```

TABLE 2
(Page 4 of 5 Pages)

151	31.	P	23	22.000	30.000	25.000	0.0000000	1.310000	1	0	0	018	E5E4E3(E2)
152	32.	P	27	37.000	89.000	50.000	0.0000000	1.200000	1	0	0	018	E5E4E3E2
153	33.	P	31	212.60	1000.0	250.00	0.0000000	1.310000	1	0	0	036	E4E3 CA
154	34.	A	39	0.0910	0.2330	0.1000	0.0000000	0.097500	1	2122620			E0(E2)
155		* M	**	0.0240	0.0530								
156	35.	A	33	0.2300	0.4800	0.3500	0.0000000	0.097500	1	0	0	021	E0E2(E3)
157	36.	A	46	0.1470	2.0000	0.6000	0.0000000	0.441000	1	0	0	021	D1F1.CA
158	37.	A	3	0.4200	1.7000	0.6000	0.0000000	0.441000	1	0	0	022	E1E2(E3)
159	38.	A	4	1.8000	4.0000	2.5000	0.0000000	0.441000	1	0	0	023	E1E2(E3L12
160	39.	A	12	4.2000	7.8000	5.0000	0.0000000	0.539000	1	0	0	024	E2E3(E4L23
161	40.	A	13	7.8000	20.000	15.000	0.0000000	0.539000	1	0	0	024	E2E3(E4L23
162	41.	A	17	3.0000	58.000	5.0000	0.0000000	1.500000	1	2183025			E5E4(E3L54
163		*M	**	176.00	1000.0								CONTAMINANT
164	42.	A	24	22.000	30.000	25.000	0.0000000	1.310000	1	0	0	025	E5E4E3(E2
165	43.	A	28	31.000	56.000	50.000	0.0000000	1.200000	1	2183025			E5E4E3E2
166		*M	**	270.00	1000.0								CONTAMINAN
167	44.	AL	01	1.0400	1.8500	1.0000	0.0000000	0.120000	1	2142819			CALC.
168		*M	**	0.2700	0.4800								CONTAMINAN
169	45.	AL	02	1.8500	3.7000	2.5000	0.0000000	0.120000	1	2142819			CALC.
170		*M	**	0.5100	1000.0								CONTAMINAN
171	46.	A	34	0.2300	0.4400	0.2000	0.000000	0.097500	1	0	0	021	E0 E2 CALC
172	47.	L	5	0.7100	5.6000	1.5000	0.000000	0.441000	1	0	0	036	E1E2(E3L12
173	48.	L	14	5.8000	28.000	6.0000	0.000000	0.539000	1	0	0	036	E2E3(E4L23
174	49.	L	18	3.9000	20.000	5.0000	0.000000	1.500000	1	0	0	036	E5E4(E3L54
175	50.	M	38	0.0600	0.2000	0.1000	0.000000	0.097500	1	3203126			E0(E2)
176		*H	**	0.0150	0.0900								CONTAMINAN
177	51.	M	35	0.2000	0.3400	0.2500	0.000000	0.097500	1	3203126			E0 E2(E3)
178		*N	**	0.1600	0.2800								CONTAMINAN
179	52.	M	47	0.1240	14.300	0.2500	0.000000	0.441000	1	3203127			D1F2 CALC
180		*H	**	0.0310	768.00								CONTAMINAN
181	53.	M	6	0.4700	5.2000	0.5000	0.000000	0.441000	1	3213228			E1E2(E3L12
182		*N	**	0.4300	4.0000								CONTAMINAN
183	54.	M	7	5.2000	8.2000	6.0000	0.000000	0.441000	1	0	0	028	E1E2(E3L12
184	55.	M	15	8.6000	40.000	15.000	0.000000	0.539000	1	3233329			E2E3(E4L23
185		*N	**	9.9000	44.000								CONTAMINAN
186	56.	M	19	6.0000	9.2000	6.0000	0.000000	1.500000	1	3243430			E5E4(E3L54
187		*N	**	6.6000	8.6000								CONTAMINAN
188	57.	M	20	9.6000	42.000	15.000	0.000000	1.500000	1	3243430			E5E4(E3L54
189		*N	**	9.2000	36.000								CONTAMINAN
190	58.	M	25	44.000	61.000	50.000	0.000000	1.310000	1	3243430			E5E4E3(E2)
191		*N	**	61.700	74.000								CONTAMINAN
192	59.	M	29	69.000	270.00	70.000	0.000000	1.200000	1	3243430			E5E4E3 E2
193		*N	**	101.00	1000.0								CONTAMINAN
194	60.	H	36	0.0990	0.1400	0.1000	0.000000	0.097500	1	0	0	031	E0(E2) CAL
195	61.	H	8	0.2800	1.9000	0.3500	0.000000	0.441000	1	0	0	032	E1E2(E3 CA
196	62.	H	9	2.0000	12.000	2.0000	0.000000	0.441000	1	0	0	032	E1E2(E3 CA
197	63.	H	43	11.800	74.000	15.000	0.000000	0.539000	1	0	0	033	E2E3(E4 CA
198	64.	H	21	8.2000	17.000	10.000	0.000000	1.500000	1	0	0	034	E5E4(E3L54
199	65.	H	22	18.000	82.000	25.000	0.000000	1.500000	1	0	0	034	E5E4(E3L54
200	66.	H	26	86.000	120.00	100.00	0.000000	1.310000	1	0	0	034	E5E4E3 CAL

TABLE 2
(Page 5 of 5 Pages)

```
201  67.  H 30 127.00  1000.0  150.00 0.000000  1.200000 1 0 0 034 E5E4E3E2 C
202  68.  S E0
203  69.  S E1
204  70.  S E2
205  71.  S E3
206  72.  S E4
207  73.  S E5
208  74.  S AL
209  75.  S AR
210  76.  ALAR
211  77.  SPARE
212  78.  SPARE
213  79.  SPARE
214  80.  SPARE
215  81.  SPARE
216  82.  SPARE
217  83.  SPARE
218  84.  SPARE
219  85.  SPARE
220  86.  SPARE
221  87.  SPARE
222  88.  SPARE
223  89.  SPARE
224  90.  SPARE
225  91.  SPARE
226  92.  SPARE
227  93.  SPARE
228  94.  SPARE
229  95.  SPARE
230  96.  SPARE
231  97.  SPARE
232  98.  SPARE
233  99.  SPARE
234  00.  SPARE
```

```
C PASSBANDS,BACKGROUNDS,AND GEOMETRIC FACTORS FOR PTM,VOYAGER II
C DECEMBER 27,1977
C        THRESHOLDS
FAT  NAME     LOW      HIGH     MEAN     BKGRND      G.F.     TEXT
 #          (MEV/N) (MEV/N) (MEV/N) (C/SEC.) (CMSQSR)
  1.  EB01 0.0125  0.0350  0.0200 0.0000000 0.002000 1 0 0 0 1
  2.  EBD1 0.0125  0.0350  0.0200 0.0000000 0.002000 1 4 0 0 1
     *S ** 1.00 1.00 1.00 1.00 1.00 1.00 1.00
  3.  EB02 0.0350  0.0610  0.0450 0.0000000 0.002000 1 0 0 0 1
  4.  EBD2 0.0350  0.0610  0.0450 0.0000000 0.002000 1 4 0 0 1
     *S ** 1.00 1.00 1.00 1.00 1.00 1.00 1.00
  5.  EB03 0.0610  0.1120  0.0900 0.0000000 0.002000 1 0 0 0 2
  6.  EBD3 0.0610  0.1120  0.0900 0.0000000 0.002000 1 4 0 0 2
     *S ** 1.00 1.00 1.00 1.00 1.00 1.00 1.00
  7.  EB04 0.1120  0.1830  0.1200 0.0000000 0.002000 1 0 0 0 3
  8.  EBD4 0.1120  0.1830  0.1200 0.0000000 0.002000 1 4 0 0 3
     *S ** 1.00 1.00 1.00 1.00 1.00 1.00 1.00
  9.  EB05 0.1830  0.5000  0.2000 0.0000000 0.002000 1 0 0 0 4
 10.  EBD5 0.1830  0.5000  0.2000 0.0000000 0.002000 1 4 0 0 4
     *S ** 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 11.  EG06 0.2520  2.0000  0.2500 0.0000000 0.002000 1 0 0 0 5
 12.  EG07 0.4800  2.0000  0.5000 0.0000000 0.002000 1 0 0 0 5
 13.  EG08 0.8530  2.0000  0.9000 0.0000000 0.002000 1 0 0 0 6
 14.  EG09 2.1000  5.0000  2.0000 0.0000000 0.002000 1 0 0 0 7
 15.  E 44 0.3500  1.5000  0.5000 0.0000000 1.310000 1 0 0 035
 16.  E 45 2.0000  100.00  2.0000 0.0000000 1.310000 1 0 0 035
 17.  E 37 6.0000  100.00  6.0000 0.0000000 1.310000 1 0 0 035
 18.  PL01 0.0235  0.0475  0.0250 0.0000000 0.120000 1 0 0 0 8
 19.  PL02 0.0475  0.0795  0.0500 0.0000000 0.120000 1 0 0 0 8
 20.  PL03 0.0795  0.1370  0.1000 0.0000000 0.120000 1 0 0 0 9
 21.  PL04 0.1370  0.2150  0.1500 0.0000000 0.120000 1 1 21111
     *A ** 0.0343  0.0538
 22.  PL05 0.2150  0.5400  0.2500 0.0000000 0.120000 1 1 21212
     *A ** 0.0538  0.1350
 23.  PL06 0.5400  0.9900  0.6000 0.0000000 0.120000 1 1 31313
     *A ** 0.1350  0.2475
 24.  PL07 0.9900  2.1400  1.0000 0.0000000 0.120000 1 1 31414
     *A ** 0.2475  0.5500
 25.  PL08 2.1400  3.5000  2.5000 0.0000000 0.120000 1 1 41414
     *A ** 0.5500  1.0000
 26.  P 32 0.3300  0.6100  0.3500 0.0000000 0.097500 1 0 0 035 E0E2(E3)
 27.  P  1 0.5200  1.4500  0.6000 0.0000000 0.441000 1 0 0 016 E1E2(E3)
 28.  P 10 4.4000  11.400  5.0000 0.0000000 0.539000 1 0 0 016 E2E3(E4)
 29.  P 11 11.400  20.000  12.000 0.0000000 0.539000 1 0 0 017 E2E3(E4)
 30.  P 16 3.0400  17.300  5.0000 0.0000000 1.500000 1 0 0 018 E5E4(E3)
```

* TWO GAIN STATES

SEE TABLE 4 for Full description.

LOW ENERGY MAGNETOSPHERIC PARTICLE ANALYZER (LEMPA)

VOYAGER-1 Ion Passbands[1] (96.5μ)

G = 0.04 cm^2sr — Field-of-View is 45°

Channel Number	H (keV)	ε	He (keV)	ε	O (keV)	ε	S (keV)	ε
PL01 *	30–53	1.0	37–62	1.0	84–135	~ 0.45	140–210	~ 0.32
02	53–85	1.0	62–100	1.0	120–206	~ 0.52	180–280	~ 0.45
03	85–139	1.0	100–160	1.0	180–260	~ 0.8	250–350	~ 0.8
04	139–220	1.0	160–235	1.0	260–370	~ 1.0	350–450	~ 1.0
05	220–550	1.0	235–550	1.0	370–790	1.0	450–880	1.0
06	550–1050	1.0	550–1050	1.0	790–1330	1.0	880–1490	1.0
07	1050–2000	1.0	1050–2000	1.0	1330–2386	1.0	1490–2530	1.0
08	2000–4000	1.0	2000–3930	1.0	2386–4400	1.0	2530–4610	1.0

* Threshold change after 0530 UT on day 67, 1979; estimated thresholds and efficiencies are shown below

PL01	45–53	~ 0.5	52–62	~ 0.5	~ 100–135	?	~ 154–210	?

VOYAGER-2 Ion Passbands[1] (89.1μ)

G = 0.113 cm^2sr — Field-of-View is 45°

Channel Number	H (keV)	ε	He (keV)	ε	O (keV)	ε	S (keV)	ε
PL01	28–43	1.0	36–49	1.0	66–108	~ 0.3	100–155	~ 0.3
02	43–80	1.0	49–86	1.0	93–150	~ 0.6	138–200	~ 0.6
03	80–137	1.0	86–145	1.0	144–220	~ 0.8	180–270	~ 0.8
04	137–215	1.0	145–230	1.0	220–340	~ 1.0	270–394	~ 1
05	215–540	1.0	230–540	1.0	340–677	1.0	394–784	1.0
06	540–990	1.0	540–990	1.0	677–1156	1.0	784–1296	1.0
07	990–2140	1.0	990–2140	1.0	1156–2320	1.0	1296–2496	1.0
08	2140–3500	1.0	2140–4000	1.0	2320–4200	1.0	2496–4400	1.0

[1] Efficiencies quoted at 75% of maximum.

DR/D5004F64 7/8/79 - 7/11/79

RECORD 11282 OF FILE 1
LENGTH = 2400 BYTES

000AA801	FF01FF01	8E018E01	80038003	1A001A00	6F01F101	0B032B03	06000100	D5069001	F000F000
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BD11BD11	CF08FF08	43004300	4F004F00	00000000	00000000	00000000	00000000	00000000	00000000
00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
2047DC54	3444F0C5	AC46609A	B543C02B	1646CC39	294310B7	1345CC7C	68422C90	A8432CB9	8F410429
84450025	6A44606A	DC4160AA	00000000	00000000	00000000	00000000	2B47F02D	3547A044	E546AC67
7B4614D7	424650A4	F244CC47	05445816	A04274D2	DE4224D5	204524D5	BA4174AA	6544F8FF	00000000
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7C42ACAA	00000000	00000000	1C414400	C03F0800	4E41A0AA	00000000	00000000	00000000	B243187C
814164B2	00000000	05405055	00000000	00000000	00000000	00000000	00000000	00000000	D53E5055
193F9899	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
00000000	00000000	00000000	03485415	8148F8FF	CA44946C	00000000	00000000	00000000	00000000
00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
0D006200	11008A00	1A00CA00	35005901	8E007902	1C003C00	5F010019	00190019	00190900	09000B00
0E000F00	28004C00	CB00AF00	24007E01	3C000019	00190019	00193200	C3000000	F100AD11	00194E00
E8000019	00194F02	E4050202	00190019	00195D00	B5010000	00050019	00190019	00190019	00192E0B
55080019	00190019	00190019	00190000	00000000	00000000	00190700	0A002B00	00000000	00000000
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78008400	84008400	7B007800	78007800	78007800	78007800	78007800	78000000	78007800	78007800
78007800	78007800	78007800	78007800	78008400	84000000	78007800	78007800	78009600	78007800
96009600	96007800	78007800	78000000	00000000	00000000	30003C00	0F008400	00000000	00000000
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48000000	9F03E804	2000FF7F	FF7F2102	00006009	4D047703	83002600	00000000	00000000	00000000
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D900D60B	00F800F8	00F87901	D30100F8	00F800F8	DD0400F8	00F800F8	00F800F8	00F800F8	00F800F8
00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00E700E7	00E70500	00003A00	00E700E7	FF7F5A23
5A2300E7	57002E00	362B0000	0000FF7F	00E70300	CC025A23	5A23FF7F	00E700E7	00E700E7	00E700E7
00FC00FC	00FC00FC	31004400	6500AD00	3C0100FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC
D5F6D5F6	D5F6D5F6	1AEB1AEB	32E732E7	D2DCD2DC	A0D1A0D1	00E800E8	00E800E8	00E850FD	50FD3DF0
D6EB91E8	3DE54AE5	4AE500E8	D2E5D2E5	00E800E8	00E800E8	00E8D2E6	33DD0000	7BD700E8	00E800E8
00E800E8	00E807DD	07DD33DD	00E800E8	00E80AE8	0AE80000	00E800E8	00E800E8	00E800E8	00E87FDF
00E800E8	00E800E8	00E800E8	00E80000	00000000	00000000	00E800E8	00E800E8	00000000	00000000
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00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
FC03FC03	FC03FC03	FF030004	00040004	00040004	00040004	0004FB03	00040004	00040004	00040004
F8030004	FB035703	FF030004	00040004	0004FE03	EF03FE03	B6030004	C2021501	51013301	E7020004
00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
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6E4E50F1	864B18B4	D34D9877	DD4AD4F6	8C4C807A	9E490CB4	D34B68D8	2749BC05	054AD0C2	E24770FD
204C28CB	614A30F2	0347D873	A7045054	4A00C889	4300787F	02001CC0	734B3081	464BE0D7	8D4A085F
114AE863	2F497849	7C47A8E8	3C463CDD	1F44E838	0046043B	8A46442A	85411801	BE435826	50007851
51005089	34009CC6	1700D890	8548F04C	1245EC36	00000000	54433029	493EB83F	3C00E0C9	2D426000
C1405C0C	51005089	1600249B	98434864	D8400C27	7945CCF5	3000483E	1A004492	2C0050B3	E2462C03
A0446C06	00000000	7941B4E2	7300B819	700058C2	5600B43A	4F008423	7200181F	1300181E	42438012
A240C8C1	95006445	20002CD9	6F005048	6D0020F5	3E00A82D	0400F0A2	00000000	00000000	00000000

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00000000 00000000 7F7FFCFF FF7FFCFF FF7FFCFF FF7FFCFF 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
0D006200 11008A00 1A00CA00 35005901 8E007902 1C003C00 5F010019 00190019 00190900 09000B00
0E000F00 28004C00 CB00AF00 24007E01 3C000019 00190019 00193200 C300FFFF F100AD11 00194E00
E8000019 00194F02 E4050202 00190019 00195D00 B501FFFF 00050019 00190019 00190019 00192E0B
55080019 00190019 00190019 0019FFFF FFFFFFFF FFFFFFFF 00190700 0A002B00 FFFFFFFF FFFFFFFF
FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
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11282 RECORDS IN FILE 1 OF TAPE

DUMP OF TAPE GOUT1

02/24/79 - 03/04/79

D-42082
C-21961

INPUT TAPE GOUT1 ON MT1
DATA_INPUT H9 FL 1 1 1

0B3F 05AB 1343 day, hr, min, milli, second 0079 year

FILE 1/ RECORD 1 LENGTH 2400 BYTES

(0)	010A0100	FF03FF03	8F028F02	80028002	3A003A00	F203F203	78007800	07000100	F1018001	80000000
(40)	00000000	00000000	00000000	00000000	00005F09	9F0F0000	000055A9	02006600	21002100	053F053F
(80)	3E053F05	AB05AB05	72037203	4F004F00	00000000	00000000	00000000	00000000	00000000	00000000
(120)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(200)	6A41ACAC	00000000	D5400456	00000000	55408455	00000000	00000000	00000000	00000000	00000000
(240)	00000000	00000000	00000000	00000000	AF41F8FF	D53F5055	00000000	00404000	2A3F00A8	AA3FCCAA
(280)	00350000	00350000	00000000	553F6855	95C03855	00000000	00000000	00000000	00000000	00000000
(320)	00000000	00000000	D141FFFF	5141F4FF	00000000	00000000	6A419CAA	00000000	00000000	00000000
(360)	00000000	00000000	00000000	CA3FB3AA	00000000	00000000	CA40A4AA	00000000	00000000	00000000
(400)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(440)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	1144FFFF	00000000	00000000
(480)	00000000	00000000	00000000	00000000	00000000	3D43FCFF	C0000000	00000000	00000000	00000000
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
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(640)	00190019	00190019	00190019	00190019	00190019	00190019	DB037405	00190000	54050019	00190019
(680)	00190019	00190000	00000019	BC050019	00190019	00190000	00190019	00000019	00000000	00000019
(720)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	0000A701	00000000	00000000
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(800)	0F000000	0F000000	0F000000	0F000000	0F000000	0F000F00	0F000F00	0F000000	0F000F00	0F000F00
(840)	0F000000	00000000	0F001000	0F000F00	1E001F00	1E001E00	10001000	10000000	0F001E00	0E001E00
(880)	0C000C00	0C000000	00001E00	1E001E00	1E000C00	0C000000	1E001E00	00001E00	00000000	00001E00
(920)	00000000	00000000	00000000	00000F00	00000000	00000000	00000000	00000C00	00000000	00000000
(960)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1000)	39F607ED	00000000	00000000	000JACEA	C2020000	00000000	00000000	00000000	00000000	00000000
(1040)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1080)	00000000	00000000	00000000	00000000	00000000	1500FF7F	1C000000	46005E00	00000000	46000600
(1120)	3E000000	5A00FF7F	3A000000	0C000000	00000200	00000000	00000000	00000000	00000000	00000000
(1160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1200)	94077E11	00F800F8	00F800F8	00F83D28	EE2E00F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8
(1240)	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8
(1280)	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	13480000	0229FF7F	5A235A23	00E700E7	5A235A23
(1320)	5A2300E7	5A230000	362B00E7	5A2300E7	00E75A23	00E700E7	00E700E7	00E700E7	00E700E7	00E700E7
(1360)	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC
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(1440)	00000000	00000000	000000E8	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1480)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
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(1560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
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(1640)	F903F803	5F006300	2A030004	00040004	00040004	00040004	00048403	00040004	00040004	00040004
(1680)	FB030004	FD03F803	FF030004	00040004	00041600	25008302	5D000004	7E006900	5E004300	26010004
(1720)	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
(1760)	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
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(1840)	0F044005	24044079	5904C4F5	AC03F869	694170A7	553CF4CA	00000000	E344FCB6	E843685E	1344A8FF
(1880)	4A392481	8D382409	00000000	024004E2	00000000	F702BCF1	6201CCC1	4500D4E5	21006400	4000104D
(1920)	2D000CB5	36008800	D03C700D	8F44C495	84023457	00000000	C641BC8D	0AA0BC36	030094EF	0F00F4EC
(1960)	25007470	2D000CB5	6A009CB6	00000000	00000000	2A04B8F0	3340942A	2B00A827	000030CE	B40044CD
(2000)	ED00E82D	00000000	2600D460	6E00A8E3	00000000	1B00448E	00000000	00000000	00000000	FA03C427
(2040)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2080)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2120)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2200)	5405FFFF	E707FFFF	2E0BFFFF	0019FFFF	0019FFFF	00190019	00190019	5A04AD11	FFFF6F0E	0019AD11
(2240)	00190019	00190019	00190019	00190019	00190019	00190019	DB037405	0019FFFF	54050019	00190019
(2280)	00190019	0019FFFF	FFFF0019	BC050019	00190019	0019FFFF	00190019	FFFF0019	FFFFFFFF	FFFF0019

55 day
24 | 1343
1320
23 hr.
24 min.
60 | 1451
14 mill.
60 | 882

D-42082

1512 days hr. 179 min.

63 day
24|1512
1512
00 hr.
3 min.
60|179

(2320)	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFD400	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFA761	FFFFFFFF	FFFFFFFF
(2360)	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF

FILE 1 RECORD 1247 LENGTH 2400BYTES

(0)	010AF200	01010101	0E920F02	00019001	3A023A02	F201F300	B602CA02	06000400	F1D19001	F000F000
(40)	00000000	00000000	00000000	00000000	00005F07	9F0F0000	00004220	66014600	15001600	D23F9D3F
(80)	E205E205	9B00B300	E403E403	4F004F00	00000000	00000000	00000000	00000000	00000000	00000000
(120)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(200)	00000000	894410AE	00000000	C94334DF	00000300	5C43E4C0	00000000	8E42A003	00000000	99410C56
(240)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	96468835	76466804	25460BA3
(280)	D3457C97	00000000	00000000	00000000	AB43A033	A3424C55	1545F8FF	9B4350D5	00000000	00000000
(320)	00000000	00000000	62419CAA	16455005	2643A0AA	00000000	73434855	00000000	00000000	55405055
(360)	00000000	00000000	00000000	00000000	60417800	0D415055	FA40A4AA	2A3EA4AA	00003000	C143F83F
(400)	CE41A4AA	00000000	AA3EA4AA	00000000	2A3EA4AA	00000000	00000000	00000000	00003030	AA40A4AA
(440)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	3F466C1C	69464C55	00000000
(480)	00000000	00000000	00000000	00000000	00000000	5F434855	00000000	00000000	00000000	00000000
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(600)	00009D00	00000401	00005F01	00007902	00003605	00190019	00190019	00190019	00002700	2A003300
(640)	49000000	00000000	42018602	77004A01	00000019	00000000	10067600	C4010000	76010000	00198000
(680)	00190019	00190000	BA026F03	A5030019	0019D100	7D040000	00190019	00190019	00190019	00194006
(720)	00190019	00190019	00190019	00193C00	37000000	00000000	00000000	00001401	00000000	00000000
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(800)	00000F00	00000F00	00000F00	00000F00	00000C00	0F000C00	0C000C00	0C000C00	00000F00	0F000F00
(840)	0C000000	00000000	0C000C00	0C000C00	00000C00	00000000	0C000C00	0C000000	0C000000	0C000C00
(880)	0C000C00	0C000000	3C003C00	3C003C00	3C001800	0C000000	1E001E00	3C001E00	3C001E00	3C001E00
(920)	1E001E00	1E003C00	3C003C00	3C000900	09000000	00000000	00001800	00000000	00000000	00000000
(960)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1000)	00000000	00000000	00000000	000052E8	97E0D9F2	00000000	00000000	0000DDED	00000000	00005CDB
(1040)	16ED0000	00000000	0000ECE0	2ADE0000	00000000	00000000	00000000	00003000	00000000	00000000
(1080)	00000000	00000000	00000000	00000000	00000000	8F03FD0D	0000FF05	FF7F0000	00000000	46000000
(1120)	00000000	B201FF7F	3A002704	0C005101	00004E00	FF7FA001	FF7F5900	00000000	00000000	00000000
(1160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1200)	00F800F8	00F800F8	00F800F8	00F84F00	6500BC00	00F800F8	00F800F8	00F87700	00F800F8	00F8D001
(1240)	E50100F8	00F800F8	00F84F03	030C00F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8
(1280)	00F800F8	00F800F8	00F800F8	00F800F8	00F800F8	0C000400	00E72700	000000E7	00E700E7	5A2300E7
(1320)	00E700E7	BF000E00	362B6501	5A23FF7F	00E71600	00005A23	0000FF7F	00E700E7	00E700E7	00E700E7
(1360)	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC	00FC00FC
(1400)	000000E8	000000E8	000000E8	000000E8	000000E8	00E800E8	00E800E8	00E800E8	000097F0	97F097F0
(1440)	D9F20000	00000000	00E800E8	BDED00E8	000000E8	00000000	00E85CDB	16ED0000	00E80000	00E800E8
(1480)	00E800E8	00E80000	00E816ED	00000000	0000ECE0	ECE00000	00E800E8	00E800E8	00E800E8	00E800E8
(1520)	00E800E8	00E800E8	00E800E8	00E800E8	00E80000	00000000	00000000	000000E8	00000000	00000000
(1560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1600)	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
(1640)	C103B703	29032F03	67030004	00040004	00040004	00040004	0004FC03	00040004	00040004	00040004
(1680)	F1030004	F703F803	FF030004	00040004	0004E201	6202F003	FD030004	FE033D02	1E02C101	45030004
(1720)	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
(1760)	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004	00040004
(1800)	00000000	F64D4469	00000000	C14C94E1	00000000	C04B7472	00000000	354B3469	00000000	E6498418
(1840)	01067C0E	74056078	18056C8C	A7045054	4A00C889	18006BC4	00000000	434CA06C	A5429C6B	AF4A283F
(1880)	3C4A9CCD	00000000	00000000	A0453092	9E458431	C3464479	68436838	00000000	03002429	
(1920)	00000000	00000000	843D9817	6A49D00D	86459490	00000000	90446C93	00000000	3C00E0C9	8435546D
(1960)	6A00B0F2	43008C20	2400C081	00000000	2943FC4D	EC442BEC	5D40B899	643CD434	00003CCE	B2469CCC
(2000)	744440FD	00000000	5A40F4BC	5200F4D3	8D3C703B	0E001CD8	46009CB5	6700AC0A	200044A3	06454808
(2040)	A50184EF	C7002C3F	4300202B	2A00F8CB	06002823	1D00E8C2	0500107A	FF7EFCFF	FF7FFCFF	00000000
(2080)	00000000	00000000	00000000	00000000	00000000	FF7FFCFF	00000000	00000000	00000000	00000000
(2120)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2200)	FFFF9D00	FFFF0401	FFFF5F01	FFFF7902	FFFF3605	00190019	00190019	00190019	FFFF2700	2A003300
(2240)	4900FFFF	FFFFFFFF	42018602	77004A01	FFFF0019	FFFFFFFF	10067600	C401FFFF	7601FFFF	00198000
(2280)	00190019	0019FFFF	BA026F03	A5030019	0019D100	7D04FFFF	00190019	00190019	00190019	00194006
(2320)	00190019	00190019	00190019	00193C00	3700FFFF	FFFFFFFF	FFFFFFFF	FFFF1401	FFFFFFFF	FFFFFFFF
(2360)	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF	FFFFFFFF

FILE INPUT DATA RECORDS MAX. READ ERROR SUMMARY INPUT RETRIES